

Remarks

Claims 1-10 are pending in this application prior to entry of the amendment above. Claims 1 and 6 are currently amended. New claims 11 and 12 are added. Reconsideration is requested in light of the amendments above and below remarks.

The Examiner has objected to claim 6 for including "there of". This language has been deleted.

The Examiner has further rejected claim 1 as obvious in light of Huttlin (6,367,165) over Funakoshi (4,967,688).

Huttlin relates to a device for treating particulate product using a process chamber constructed from substantially plane baffle plates overlapping each other with slots formed between said overlapping plates. Process air is introduced into the process chamber via slots between the plates.

Funakoshi relates to a powder processing apparatus of the fluidized bed type wherein air is blown into a cylindrical container through its bottom to perform various treatments while keeping powder in the container in fluidized condition. Air fed in through an opening in the bottom surface of the container is introduced into a rotating hollow frusto-conical body and is allowed to blow out in the centrifugal direction from an air diffusion clearance defined between the skirt end of the frusto-conical body and the bottom surface of the container, thereby forming a fluidized bed of powder. The portion of the bottom surface around the opening rises and/or a member made of air-permeable material is installed in the opening in the bottom surface to prevent passage of powder; this arrangement, coupled with the air current blowing out of the air diffusion clearance, prevents entry and hence flow-out of powder.

The present invention relates to an apparatus for treating particle-shaped material comprising a process chamber and, among other things, an active vertical adjustment device which interacts with guide plates by which the distance between the guide plates and thus the height of slots can be actively varied. By including an actively driven vertical-adjustment device the present invention is capable of closing all the slots when filling the process chamber with the particles to be treated. This avoids the problem of particles falling down through the slots down into the inflow chamber. When process air is introduced, the plates are capable of rising and the slots are opened. In a process for agglomerating fine particles to more coarse particles, it is desirable to change the size of the slots during the process run. Moreover, actively driven slots allow the slots to close at the end of operation, solving the problem of having final product from falling into the inflow chamber.

Amended claim 1 requires an actively driven vertical-adjustment device. Huttlin fails to provide any vertical-adjustment device. The Examiner has taken the position that Funakoshi provides clearance 8, which can be changed by adjusting the vertical position of the frusto-conical body 6. However, no actively driven vertical adjustment device is disclosed. Furthermore, it is respectfully submitted that the Examiner's interpretation of Funakoshi is misplaced in that driving unit 52 which serves as the turning point for the shaft 5 is not capable of moving part of the conical body back and forth in a vertical direction. In contrast to the present invention, Funakoshi describes at Col. 5, line 56, a frusto-conical body 6 removably attached to the upper end of the shaft 5 by a nut 51. At Col. 6, lines 27-32 it is further stated that adjustment can be done by changing the axial attaching position of the frusto-conical body 6 with respect to shaft 5. Thus Funakoshi teaches to vary or adjust the clearance 8 when mounting the frusto-conical body 6 onto the upper end of shaft 5. Since nut 51 is disposed within the body of the apparatus, *i.e.* in the process chamber, nut 51 is not accessible during operation of the apparatus. Accordingly, one of ordinary skill in the art would not be motivated by either

references, taken alone, or in combination to provide an actively driven vertical-adjustment device. Thus, amended claim 1 is not obvious.

Finally, independent claim 1 requires, a series of guide plates which are placed one above the other in different planes and overlap one another, thereby forming slots between said guide plates. Conversely, Funakoshi does not disclose more than one slot. Claim 1 as amended requires, the vertical adjustment device capable of changing the distance between all of said guide plates. The Examiner has corrected stated that Huttlin lacks teaching a vertical adjustment device which interacts with the guide plates for varying the height of the slots. Also, nowhere does Funakoshi suggest or teach changing a plurality of guide plates, thus on of ordinary skill in the art would not be motivated by Funakoshi either alone, or with any other reference to modify the device of Funakoshi to actively displace all guide plates during operation. Thus, independent claim 1 is not obvious.

New claim 12 includes all of the limitations of original claim 1 in combination with original claim 4. Thus it is believed to overcome the Examiner's objections and be allowable.

It is respectfully submitted that claims 1-12 are in condition for allowance and early notification to that effect is requested.

Respectfully submitted,



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